

CLAIMS

WHAT IS CLAIMED:

Sub 1

A method, comprising:

receiving samples of data in a buffer;

determining if the received samples of data will exceed the storage capacity of the buffer;

deleting selected samples of data from the buffer in response to the storage capacity being exceeded; and

reconstituting the selected samples of data deleted.

2. The method of claim 1, wherein deleting selected samples of data from the buffer in response to the storage capacity being exceeded, further comprises:
deleting selected samples in contiguous blocks of the buffered data within the buffer.

3. The method of claim 1, wherein deleting selected samples of data from the buffer in response to the storage capacity being exceeded, further comprises:
deleting selected samples by every nth sample of the buffered data within the buffer.

4. The method of claim 2, wherein deleting selected samples in contiguous blocks of the buffered data within the buffer, further comprises:
recording the locations of a starting and ending point defining the continuous block being deleted.

5. The method of claim 4, wherein reconstituting the selected samples of data deleted, further comprises:

reconstituting the selected samples of data deleted based in part upon the recorded locations.

5

6. The method of claim 3, wherein deleting selected samples by every nth sample of the buffered data within the buffer, further comprises:

recording the locations of a starting and ending point defining the nth samples being deleted.

7. The method of claim 6, wherein reconstituting the selected samples of data deleted, further comprises:

reconstituting the selected samples of data deleted based in part upon the recorded locations.

15

8. The method of claim 1, further comprising:

performing symbol alignment and time domain equalization on the received samples from the sample buffer.

20

9. The method of claim 8, wherein performing symbol alignment and time domain equalization on the received samples, further comprises:

performing symbol alignment and time domain equalization on the received samples in response to the storage capacity of the buffer not being exceeded.

10. The method of claim 8, wherein performing symbol alignment and time domain equalization on the received samples, further comprises:

performing symbol alignment and time domain equalization on the received samples
in response to the storage capacity of the buffer being exceeded after
reconstituting the selected samples that were deleted.

11. A method, comprising:

receiving samples of data in a buffer;
determining if the received samples of data will exceed the storage capacity of the
buffer;
compressing the samples of data from the buffer in response to the storage capacity
being exceeded; and
decompressing the samples of data that were compressed.

12. The method of claim 11, wherein compressing the samples of data, further
comprises:

rounding the samples of data from the buffer in response to the storage capacity being
exceeded.

13. The method of claim 11, wherein compressing the samples of data, further
comprises:

truncating the samples of data from the buffer in response to the storage capacity
being exceeded.

14. The method of claim 12, wherein compressing the samples of data from the buffer in response to the storage capacity being exceeded, further comprises:

recording the locations of a starting and ending point defining the data being compressed.

5

15. The method of claim 14, wherein decompressing the samples of data that were compressed, further comprises:

decompressing the samples of data that were compressed based in part upon the recorded locations.

16. An apparatus, comprising:

a receiver adapted to receive samples of data;

a buffer adapted to store the received samples of data; and

a controller adapted to determine if the received samples of data will exceed the

15

storage capacity of the buffer, delete selected samples of data from the buffer in response to the storage capacity being exceeded, and reconstitute the selected samples of data deleted.

17. The apparatus of claim 16, wherein the controller is further adapted to delete

20 selected samples in contiguous blocks of the buffered data within the buffer.

18. The apparatus of claim 16, wherein the controller is further adapted to delete selected samples by every nth sample of the buffered data within the buffer.

19. The apparatus of claim 17, wherein the controller is further adapted to record the locations of a starting and ending point defining the continuous block being deleted.

20. The apparatus of claim 19, wherein the controller is further adapted to
5 reconstitute the selected samples of data deleted based in part upon the recorded locations.

21. The apparatus of claim 18, wherein the controller is further adapted to record the locations of a starting and ending point defining the nth samples being deleted.

22. The apparatus of claim 21, wherein the controller is further adapted to
10 reconstitute the selected samples of data deleted based in part upon the recorded locations.

23. An apparatus, comprising:

a receiver adapted to receive samples of data;

15 a buffer adapted to store the received samples of data; and

a controller adapted to determine if the received samples of data will exceed the

storage capacity of the buffer, compress the samples of data from the buffer in
response to the storage capacity being exceeded, and decompress the samples
of data that were decompressed.

20 24. The apparatus of claim 23, wherein the controller is further adapted to round the samples of data from the buffer in response to the storage capacity being exceeded.

25 25. The apparatus of claim 23, wherein the controller is further adapted to truncate the samples of data from the buffer in response to the storage capacity being exceeded.

26. The apparatus of claim 24, wherein the controller is further adapted to record the locations of a starting and ending point defining the data being compressed.

27. The apparatus of claim 26, wherein the controller is further adapted to decompress the samples of data that were compressed based in part upon the recorded locations.